

Prairie Chicken Success Story

By Ron Wilson

As a footnote in history in 1945 – sandwiched somewhere between news of World War II ending and the unveiling of Earl S. Tupper's food storage containers – North Dakota held what was believed to be its last hunting season for prairie chickens.

Nearly 60 years later, promise of an experimental fall hunting season is in the air for two separate populations of birds that have been left undisturbed for years. Meaning: If North Dakota Game and Fish Department officials give the go-ahead for an abbreviated nine-day hunt in October, a little bit of history will be rewritten and the 1945 season won't be the last.

Despite similarities to indigenous sharp-tailed grouse, and more than a century-long association with North Dakota, prairie chickens are not native to the state, which might surprise some people. These birds, also known as pinnated grouse, arrived on the heels of homesteaders in the late 1800s, and after the great herds of bison had vanished.

Pioneers to North Dakota created with the plow what was once lacking to get prairie chickens through the lean months – small patchworks of winter food in corn and grain. “The birds now had something to help them through the winter months, plus they had the native grasses for other needs,” said John Schulz, Department private lands section leader, who worked with prairie chickens for years as an upland game bird biologist.

Prairie chickens were first noted in the Red River Valley in the late 1880s, and spread across the state except for much of the more rugged badlands. Their story is one of boom and almost bust. Good pinnated grouse years, biologists tell us, were from 1900-1930. By the 1960s, North Dakota's population was estimated at about only 4,000-5,000 birds. They arrived, thrived and passed into obscurity, all in a little over 50 years, Schulz said.

“When I came to our homestead nine miles south of Jamestown in 1892 there were prairie chickens everywhere. These ‘broadtails’ were thick from the 1890s to 1930s,” reported Ben Baenen of Jamestown in *Feathers from the Prairie*.

While farming opened doors to prairie chickens in North Dakota, it also helped to close them years later. Farms, as farming methods became more efficient, simply got too big for the birds. As native prairie acres declined, so did pinnate populations. “The birds disappeared so fast because the farming just got too intensive, and the tallgrass vegetation the birds favored was gone,” said Jerry Kobriger, Department upland game management supervisor in Dickinson. “But why we nearly lost them altogether, we don't really know the answer.”

About 20 years ago, Schulz said, only the Sheyenne Grasslands in southeast North Dakota could claim anything near a substantial population. In the Manvel area northwest of Grand Forks, a few birds held on, but by 1980 they were gone.

Non-native prairie chickens came to North Dakota more than a century ago on the heels of homesteaders.

Efforts to reestablish prairie chickens in the Manvel area in northeast North Dakota began in the late 1960s. The idea was to buy land and manage it for the birds, but land acquisitions were slow in coming. The project received a needed boost in 1985 from the Conservation Reserve Program, an unexpected source that added nearly 34,000 acres of restored grasslands within a six-mile radius of the already established 3,600-acre Prairie Chicken Wildlife Management Area. Add that to the nearly 13,000 acres of public land in the area, and scientists deemed it time for the return of prairie chickens.

Biologists began bringing in pinnated grouse from elsewhere, starting in 1992 with 29 birds from Minnesota. "We felt these birds were best suited to survive on the tundra of North Dakota since they were doing well in Minnesota and were practically adjacent (about 25 miles) to the release area," Schulz said.

Between 1992-98, more than 300 wild-trapped grouse from Minnesota, South Dakota and Nebraska were released in Grand Forks County.

There were concerns about whether the transplanted birds would reestablish in the area from which they had originally vanished. "While we were releasing birds in an area where they had died out, we were releasing wild, not pen-raised birds," Schulz said. "The only time those birds were in crates was their journey to Grand Forks County."

Wild birds, Schulz said, were at least instinctively fitted with an idea of what animals would want to eat them. "Another thing that was key to the future of the population was the genetic diversity," he said. "While other prairie chicken populations elsewhere have too much inbreeding going on, the birds we were getting came from populations in three different states."

The better the genetic diversity, the healthier the population, Kobriger said. "Without infusion of new genetic material, production drops off, survival drops off, and the population disappears," he said.

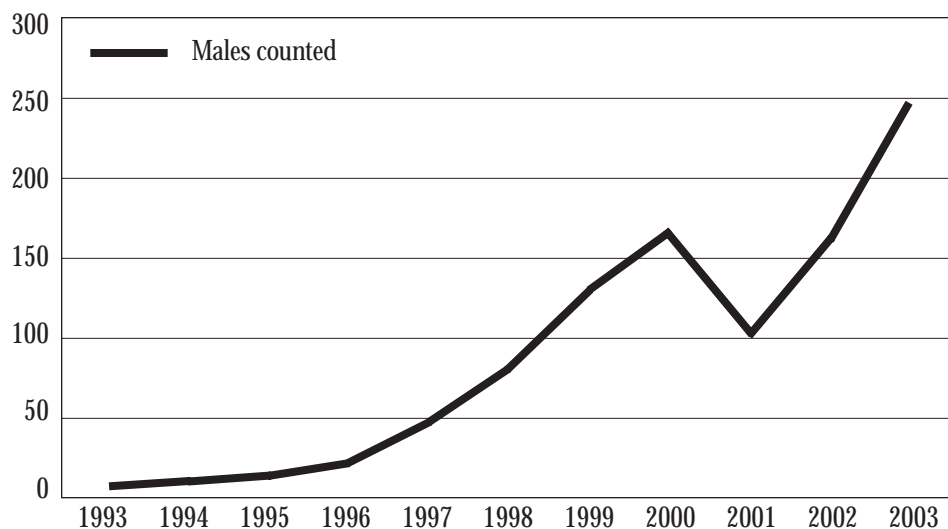
Maintaining genetic diversity among North Dakota's pinnated grouse populations remains a concern, which is why scientists met in March at a tri-state grouse summit in Fargo to discuss the possibility of connecting segmented populations in the Dakotas and Minnesota by developing land bridges.

The idea is to establish grassland corridors between populations that would enable birds to eventually link, and mix, with differing prairie chicken populations. Some habitat bridges would be shorter than others. For example, the prairie chicken population in Grand Forks County is only about 25 miles from a population near Crookston, Minnesota.

To be successful, biologists say, the habitat bridges don't have to be contiguous, nor do they have to run in a straight line. If some bridges are established, birds could be

PRAIRIE CHICKEN CENSUS DATA

Male Prairie Chickens Counted on Grand Forks Census Area
North Dakota, 1993-2003



Daphne Kinzler

trapped and moved to the new lands, shortening the distance between populations.

The beginnings for transplanted birds in Grand Forks County more than a decade ago were modest, but have since grown. In 1993, the number of males counted during spring displays was four. But by 2000, that number had climbed to 169 birds.

Then the unthinkable. During one June day in 2000, about 17 inches of rain fell in Grand Forks County where the birds call home. "It was just about the peak of the hatch in that part of the world for prairie chickens and sharp-tailed grouse," Schulz said. "We had some radio-collared birds that died and washed up in ditches. We lost an estimated 30 percent of the adults that year, and there was very little recruitment into the population."

In 2001, the number of males counted was 98, setting the population back to about where it was in 1998. The prairie chicken population was down, but not out. In 2002, the number of males counted jumped to 160, and continued to climb to 245 in 2003. "If given the right nesting and brood rearing

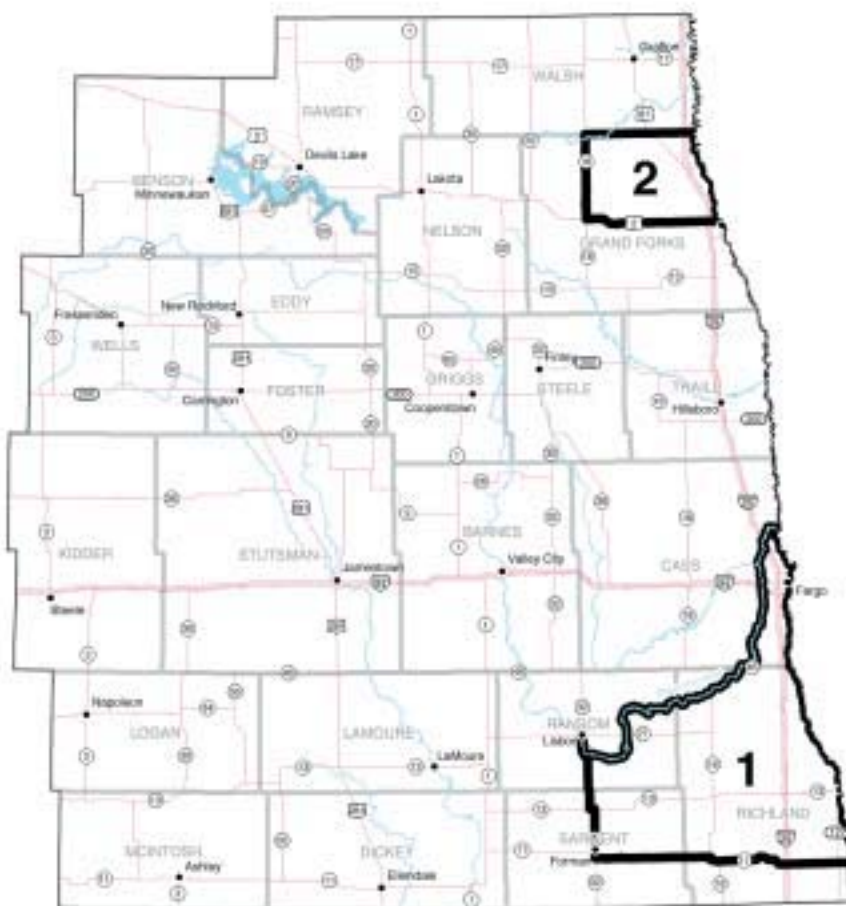
conditions, the reproductive potential of upland game birds is fantastic," Schulz said.

Before 2004 spring counts, biologists estimated the Grand Forks County fall prairie chicken population at about 1,200 birds. Fall population estimates for prairie chickens in the Sheyenne Grasslands was similar.

The goal from the start was that one day prairie chicken populations would reach levels in North Dakota that hunters could someday pursue them. Now could be the time. "North Dakota sportsmen have put a lot of money into this project for trapping and transplanting prairie chickens ..." Koberger said. "Sportsmen should reap some of the benefits now that the birds are here. Who knows what is going to happen to the birds in the future."

Game and Fish officials want to first see spring male prairie chicken counts before the go-ahead is given for an experimental prairie grouse hunting season. "If the population is stable this spring, I think we'll go ahead with a season," Koberger said. "If we get a disaster, like 17 inches of rain in a day that wipes out production, then we will keep it closed."

PRAIRIE GROUSE HUNTING ZONES



Considering that North Dakota upland hunters haven't chased prairie chickens in the state in nearly 60 years, it's difficult to gauge the amount of interest a season would bring. In 2003, Minnesota, for example, held its first prairie chicken season since 1942, and about 800-900 hunters applied for 100 special resident-only chicken permits.

The particulars of North Dakota's proposed experimental prairie grouse season look like this:

- Season dates – October 9-17.
- Number of permits – 50 in Grand Forks County and 50 in southeast North Dakota, limited to resident hunters only.
- Shooting hours – Half-hour before sunrise to sunset each day.
- Limits – Daily, possession and season limits will be two prairie grouse, which may be any combination of sharp-tailed grouse or prairie chicken.
- Open areas – Those areas in northeast and southeast North Dakota (see map)

Providing quality prairie habitat has been key to the recovery of prairie chickens in North Dakota.



Daphne Kinzler

Safeguarding Habitat on Private Lands

A grant program developed by the U.S. Fish and Wildlife Service will address habitat needs of species at risk – prairie chickens and sage grouse included – in North Dakota and elsewhere.

The Landowner Incentive Program, or LIP, will supplement the North Dakota Game and Fish Department's Private Lands Initiative in protecting and restoring wildlife habitat on private lands.

"The program is designed to help states protect habitat so species don't get to the point where they are endangered," said John Schulz, Department private lands section leader.

Landowners will receive upfront payments, Schulz said, for agreements of up to 20 years, or other direct payments for habitat management, development or restoration. Public walk-in access will be provided.

In eastern North Dakota, for example, the plan is to protect existing tallgrass prairie habitat for prairie chicken breeding, nesting and foraging. In the southwest part of the state, safeguarding what remains of existing sagebrush steppe habitat so vital to survival of sage grouse is the goal.

Because more than 90 percent of North Dakota is privately owned, Schulz said, preservation of the state's rich fish and wildlife heritage will largely be determined by the ability of private landowners to provide habitat. And LIP can help.



Daphne Kinzler

Tail of Two Grouse

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Prairie Chicken (Pinnated Grouse)

- Features a short, square tail that opens into a fan shape when in flight.
- Flecks of black, buff and white cover its brown back.
- Breast feathers are light, with dark brown barring.
- Small tuft of elongated, stiff feathers on the side of neck. Both sexes erect tufts during spring breeding displays.
- Male inflates large, orange air sacs on sides of neck, spreads tail fan, drags wing tips on the grounds, and makes a booming sound during spring breeding displays.

Sharp-tailed Grouse

- Tail short and pointed, with white outer tail feathers. Tail of male longer than female.
- Head and upper body barred with white, brown and black blotches. White spots conspicuous on wings.
- Breast and flank covered with brown and white V-shaped markings, with relative amounts of white increasing toward the abdomen.
- Feet of both sexes feathered to the toes.
- Male inflates purplish sacs on sides of neck and swiftly stamps feet during spring breeding displays. With tail erect, lowered wings and outstretched neck, he makes mechanical sounds, accompanied by resonant notes.

Craig Bhrle



closed during the regular prairie grouse hunting season.

The purpose of the season is to allow for a limited harvest of prairie chickens, but it's unlikely all participants will go home with a pinnated grouse. Sharp-tailed grouse, a native bird that shares the same habitat and looks similar when flushed, will certainly fill some hunters' two-bird limit.

Both Kobriger and Schulz have hunted prairie chickens in Nebraska and vouch for the similarity between the two species on the wing. "There is no difference in flush and flight characteristics between the two species," said Kobriger, who has hunted pin-

nated grouse maybe four times, but bagged only one. "I had some beautiful shots, but just couldn't hit them. I guess it was because I wanted one so bad."

Schulz offers that prairie chickens don't "chuckle" like sharp-tailed grouse when flushed. Plus, the former has a squarish tail, not pointed like the aptly named sharptail. "Prairie chickens are a delight to hunt," he said. "Something hunters in North Dakota haven't been able to do, of course, for nearly 60 years."

RON WILSON is editor of *North Dakota OUTDOORS*.

John Schulz, Department private lands section leader, who worked with prairie chickens for years, releases a wild-trapped bird in northeast North Dakota in 1998.



Craig Bhrle